

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A cellular ~~mobile~~ communication system wherein a mobile communication service area is divided into a plurality of location registration areas, and a mobile router in a dormant state moving with a plurality of mobile nodes in a dormant state performs location update of the mobile nodes on behalf of the mobile nodes, the cellular ~~mobile~~ communication system comprising:

a unit for retaining a flag indicating whether the mobile router is in an active state or a dormant state; active or not

a unit for inquiring about routing address information for the mobile router in an active state based on a value of the retained flag when paging is performed to at least one of the mobile nodes; and

a unit for performing paging to at least one of the mobile nodes ~~node~~ using the obtained routing address information of the mobile router in an active state as a result of the inquiry.

2. (Currently Amended) The cellular ~~mobile~~ communication system according to claim 1, further comprising a unit for setting the flag to a first value indicating an active state in response to a first signal sent from the mobile node and indicating start of communication, and setting the flag to a

second value indicating a dormant state in response to a second signal sent from the mobile node and indicating end of communication.

3. (Currently Amended) A cellular ~~mobile~~ communication system wherein a mobile communication service area is divided into a plurality of location registration areas and a mobile router in a dormant state moving with a plurality of mobile nodes performs location update of the mobile nodes on behalf of the mobile nodes, the cellular ~~mobile~~ communication system comprising:

a routing manager; and

a location manager.

[[a]] the routing manager comprising:

a table for storing routing address information for the mobile router;

and

a unit for, when the routing address information for the mobile router in the table is updated, notifying the updated routing address information to the location manager; and

[[a]] the location manager comprising:

a table for storing the routing address information notified by the routing manager as location area information for the mobile router in an active state; and

a unit for performing paging to at least one of the mobile nodes using the location area information of the mobile router in an active state stored in the table.

4. (Currently Amended) A location manager for use in a cellular communication system wherein a mobile communication service area is divided into a plurality of location registration areas, and a mobile router in a dormant state moving with a plurality of mobile nodes performs location update of the mobile nodes on behalf of the mobile nodes, the location manager comprising:

a unit for retaining a flag indicating whether the mobile router is in an active state or a dormant state ~~active or not~~;

a unit for inquiring about routing address information for the mobile router based on a value of the retained flag when paging is performed to at least one of the mobile nodes; and

a unit for performing paging to at least one of the mobile node nodes using the routing address information of the mobile router in an active state obtained as a result of the inquiry.

5. (Previously Presented) The location manager according to claim 4 further comprising a unit for setting the flag to a first value indicating an active state in response to a first signal sent from the mobile node and indicating a start of communication, and setting the flag to a second value indicating a

dormant state in response to a second signal sent from the mobile node and indicating an end of communication.

6. (Currently Amended) A location manager for use in a cellular communication system wherein a mobile communication service area is divided into a plurality of location registration areas, and a mobile router in a dormant state moving with a plurality of mobile nodes performs location update of the mobile nodes on behalf of the mobile nodes, the location manager comprising:

a table for storing routing address information for the mobile router, which is notified from a routing manager whenever the routing address information is updated, as location area information for the mobile router; and

a unit for performing paging to at least one of the mobile nodes using the location area information of the mobile router in an active state stored in the table.

7. (Currently Amended) A routing manager used for a cellular mobile communication system wherein a mobile communication service area is divided into a plurality of location registration areas, and a mobile router in a dormant state moving with a plurality of mobile nodes performs location update of the mobile nodes on behalf of the mobile nodes, the routing manager comprising:

a table for storing routing address information for the mobile router in an active state; and

a unit for replying the routing address information stored in the table in response to an inquiry from a location manager about the routing address information for the mobile router in an active state.

8. (Currently Amended) A routing manager used for a cellular ~~mobile~~ communication system wherein a mobile communication service area is divided into a plurality of location registration areas, and a mobile router in a dormant state moving with a plurality of mobile nodes performs location update of the mobile nodes on behalf of the mobile nodes, the routing manager comprising:

a table for storing routing address information for the mobile router in an active state; and

a unit for, when the routing address information for the mobile router in an active state in the table is updated, notifying the updated routing address information to a location manager.